



**OU1 Design Change and Modification Sheet:  
Change/Modification # 27**

*This form is used to document changes and modification to the approved plans.*

*This form will be kept with the official Quality Control Site Plan.*

Date Initiated: 5/21/12

Date Executed: 5/24/12

Property ID: \_\_\_\_\_ Operable Unit 1 (Area 2)

**Design Change / Modification Description:**

Area 2, Sheet C5. River water hydrant pad. Place 1.5" crushed rock in lieu of top soil at the rear/northerly side of the concrete pad to facilitate run-off drainage and eliminate the development of mud resulting from water run-off from the hydrant's concrete pad.

Changes marked on Quality Control Plans? Yes \_\_\_\_\_ No \_\_\_\_\_

Signatures:

Approved:

USACE or EPA:

Date: 5-24-12

City of Libby:

Date: 5/24/2012

Acknowledged:

CQC:

Date: 5/24/12

TQA:

Date: 5/24/12

ESTIMATED RESTORATION VOLUMES:

COMMON FILL - 1,260 CY

TOP SOIL - 395 CY

3/4" MINUS STRUCTURAL FILL - 200 CY

NOTE:  
THESE VOLUMES DO NOT INCLUDE THE BOAT RAMP RESTORATION.

NOTE FOR AREA 2 - RIVERFRONT PARK

1. ALL DISTURBED AREAS SHALL BE SEEDED AND REVEGETATED.

NOTES FOR AREA 3 - EMBANKMENTS

1. ALL AREAS SHALL BE GRADED TO BLEND INTO THE SURROUNDING GRADE. EROSION CONTROL BLANKETS (APPROXIMATELY 21,865 SF) SHALL BE PLACED ON THE DISTURBED AREAS AS PER MANUFACTURER'S SPECIFICATION AND SEEDED AS SHOWN ON DETAIL A ON SHEET D1.
2. COMPACTION SHALL BE ATTAINED AS PER CURRENT MDT SPECIFICATIONS USING EITHER A STAND-ALONE COMPACTOR OR A COMPACTION ATTACHMENT ON AN EXCAVATOR.
3. DISTURBED AREAS SHALL BE SEEDED ACCORDING TO MDT SPECIFICATIONS.
4. APPROXIMATELY 2,640 SF OF AREA UNDER THE HWY 37 BRIDGE SHALL BE RESTORED BY PLACING A PHYSICAL BARRIER, GEOTEXTILE, OVER THE EXISTING SURFACE OVERLAIN BY 12 INCHES OF STRUCTURAL FILL.

PLACE 1.5" CRUSH ROCK  
IN LIEU OF TOP SOIL

SEE SHEET C7 FOR  
BOAT RAMP RESTORATION PLAN

SEE SHEET C7 FOR  
RIVERBANK RESTORATION

KOOTENAI RIVER

SEE SHEET C7 FOR  
RIVERBANK RESTORATION

AREA UNDER THE BRIDGE  
SEE NOTE 4 - EMBANKMENTS

SEE SHEET C6D FOR  
EMBANKMENT RESTORATION

AREA 3

HIGHWAY 37

SEE DETAIL A ON SHEET D1  
FOR EMBANKMENT RESTORATION (TYP)

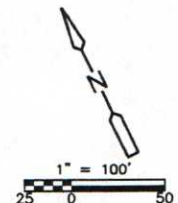
LEGEND

- AREA 1 - FORMER EXPORT PLANT
- AREA 2 - RIVERFRONT PARK
- AREA 3 - EMBANKMENTS
- GUARD RAIL
- EXISTING CONTOURS MAJOR
- EXISTING CONTOURS MINOR
- PROPOSED CONTOURS MAJOR
- PROPOSED CONTOURS MINOR

- 2010 QUICK RESPONSE REMOVAL (DO NOT DISTURB)
- SEED RESTORATION (SEE TYPICAL SECTION 1 ON SHEET D1)
- CRUSHED ROCK RESTORATION (SEE TYPICAL SECTION 2 ON SHEET D1)
- EMBANKMENT RESTORATION (SEE TYPICAL SECTION 4 ON SHEET D1)
- UNDER THE BRIDGE RESTORATION (SEE TYPICAL SECTION 5 ON SHEET D1)

AREA OUTSIDE OF THE EXTENT OF THIS DRAWING

- DAVIS CONTROL POINT
- COMPUTED BOUNDARY LOCATIONS PER C.D.S. 233 LCR
- MISCELLANEOUS TREES
- UTILITY POLES
- CHAINLINK FENCE
- LIGHT POST
- RAIL ROAD TIE POSTS
- WATER MAIN
- MONITOR WELL
- SEWER MAINHOLE
- FIRE HYDRANT
- IRRIGATION VALVE
- EXPOSED BURIED POWER LINES
- DECORATIVE ROCKS



UNABLE, PROCESSED,  
THE STATE OF MONTANA  
ISHED BASE COURSE

3/4 INCHES IN THE  
WN IN TABLE 2.

SEED MIX FOR DISTURBED AREAS WITHIN MDT RIGHT OF WAYS

RIPARIAN WHEATGRASS	2 LBS/ACRE
HARD FESCUE	5 LBS/ACRE
TALL FESCUE	3 LBS/ACRE
CANADA BLUEGRASS	5 LBS/ACRE
REGAR MEADOW BROME	5 LBS/ACRE

TOTAL 20 LBS/ACRE

ESTIMATED DISTURBED AREA = 0.5 ACRES

NOTES:

1. EMBANKMENT AREAS SHALL BE SEEDED ACCORDING TO MDT SPECIFICATIONS.
2. SEED MIX IS APPLICABLE FOR ALL AREAS TO BE RESTORED AS HYDROSEED, EMBANKMENT RESTORATION AND PLANTED RIPRAP.
3. CONTRACTOR ALSO RESPONSIBLE FOR RESTORING AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.

Revisions			
Symbol	Descriptions	Date	Approved
REV.1	PROJECT REVIEW COMMENTS	2/1/12	GM

CDM Federal Programs Corporation



US ARMY CORPS OF ENGINEERS  
OMAHA DISTRICT  
RAPID RESPONSE PROGRAM

Designed by:  
K. MAINZHAUSEN

Drawn by:  
K. HUFFSMITH

Checked by:  
G. MCKENZIE

Submitted by:  
G. MCKENZIE



US EPA  
Region VIII  
Denver, Colorado

LIBBY ASBESTOS PROJECT  
LIBBY, MONTANA

OU1-REMEDIAL ACTION  
PROPOSED AREAS 2 & 3  
RESTORATION PLAN

Scale: 1" = 100'

Date: FEBRUARY 2012

Dwg. No.: 7

Sheet number:

C5

Plot Scale:

Design File:

File: K:\Libby\_OU1\DWG\September 2011  
dwg\CS PROPOSED INITIAL GRADING  
AREAS 2 & 3.dwg